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 Federal Democratic Republic of Ethiopia  
 Ministry of Culture & Tourism  
 Authority for Research & Conservation of  
 Cultural Heritage

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**Subject RESPONSES TO THE WORLD HERITAGE COMMITTEE DECISION**

Dear Kishore,

In accordance with **Decision-35COM 7B.3** I am pleased to submit to the World Heritage Centre a progress report for the issues raised by the Committee, in the indicative format, for examination by the World Heritage Committee at its 36<sup>th</sup> session in 2012. The report is therefore enclosed to this letter.

Ethiopia wishes to reassure the World Heritage Committee that the State Party will continue to implement the World Heritage Convention to ensure the sustained protection of World Heritage Properties, elsewhere.

Should you require any further information, I always remain at your disposal.



Faithfully yours,

*Yonas Desta*  
**YONAS DESTA**  
**GENERAL DIRECTOR**

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**Federal Democratic Republic of Ethiopia**

**STATE PARTY REPORT**

**IN RESPONSE TO THE WORLD HERITAGE  
COMMITTEE DECISION  
WHC 34 COM 7B.44**

**FOR SUBMISSION BY 1 FEBRUARY 2012**

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## The World Heritage Committee Decision

### Thirty-five sessions in June 29- July 3 August 2011

#### Decision-35COM 7B.3

The World Heritage Committee,

1. Having examined Document WHC-11/35.COM/7B.Add,
2. Expresses its utmost concern about the proposed construction of the GIBE III dam on the Omo River in Ethiopia and its likely impacts on Lake Turkana, which is located downstream in neighboring Kenya and draws almost 90% of its inflow from the above river;
3. Takes note of the African Development Bank's April 2010 study of the GIBE III proposal, "Assessment of Hydrological Impacts of Ethiopia's Omo Basin on Kenya's Lake Turkana Water Levels", which concludes that the construction and operation of the dam is likely to result in a significant drop in the Lake's water levels, cessation of the current seasonal flooding pattern, losses of nutrient and mineral-rich sediments due to the upstream reservoir, rising salinity and the disruption of the lake's chemical balance, among other impacts that have yet to be quantified;
4. Considers that the GIBE III dam is likely to significantly alter Lake Turkana's fragile hydrological regime, and threaten its aquatic species and associated biological systems, which are the basis of its inscription on the List of World Heritage under criterion (x), and that this development may pose an imminent danger to the property's Outstanding Universal Value, in line with Paragraph 180(b) (ii) of the Operational Guidelines;
5. Urges the State Party of Ethiopia to immediately halt all construction on the GIBE III dam in line with Article 6 of the Convention requiring State Parties not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage located on the territory of another State Party, and to submit all assessments for this proposal to the World Heritage Centre, in line with Paragraph 172 of the Operational Guidelines;
6. Also expresses its concern about the potential cumulative impacts of the proposed GIBE IV and GIBE V dams and large-scale irrigation plans on the property's Outstanding Universal Value, and requests the State Party of Ethiopia to submit assessments for all proposed dams and associated irrigation plans on the Omo River;
7. Also requests the States Parties of Kenya and Ethiopia to invite a joint World Heritage Centre/IUCN reactive monitoring mission to review the impacts of the GIBE III dam on the Outstanding Universal Value of Lake Turkana, and to provide detailed information on plans for other hydro-electric developments and associated large-scale irrigation in the Omo region;
8. Encourages all financial institutions supporting the GIBE III dam to put on hold their financial support until the World Heritage Committee reviews this issue at its 36th session in 2012, and to take account of the Committee's decisions when deciding whether to provide such funding;
9. Further requests the States Parties of Ethiopia and Kenya to submit to the World Heritage Centre, by **1 February 2012**, a report on the course of action taken in response to this decision for examination by the World Heritage Committee at its 36th session in 2012, **with a view to considering, in the case of confirmation of the ascertained or potential danger to Outstanding Universal Value in light of the mission's review of the likely impacts of the GIBE III dam on Lake Turkana, the possible inscription of the property on the List of World Heritage in Danger.**

## **Executive Summary**

This assessment report on the World Heritage Committee's request Related to the likely impacts of the GIBE III Dam in Ethiopia on Lake Turkana, in Kenya;

- Responds to the world Heritage Committee's **Decision-35COM 7B.3** made in Paris, France in (2011) by providing a detailed report on the concerns raised in the decision

### **1. Responses of the State Party**

This document includes the assessment report requested by the World Heritage Committee in **Decision-35COM 7B.3** and related issues raised by the Committee. The report is provided for examination by the World Heritage Committee at its 36th session in 2012.

#### **1.2) The construction of the GIBE III dam on the Omo River in Ethiopia and its likely impacts on Lake Turkana in Kenya;**

The Federal Democratic Republic of Ethiopia started the construction of Ghibe III Dam by making sure that the Dam will not have any significant impact on the overall Environment of the area, including Turkana Lake, positioned between **Ethiopia** and Kenya.

The Ghibe III Dam which is under construction on the Omo River in Ethiopia is a hydropower project that does not have any consumptive use of the water. The drainage area of the dam is about one-third of the total Omo–Ghibe Basin and regulates the flow of about 60% of the discharge. The remaining 40% of the flow comes from part of the basin downstream of the dam. The information that 90% of the flow comes from Ethiopia is difficult to establish as there is no information about the Kenyan part of the Basin.

The report produced focused on the probable negative impact of the Dam, which makes the decision unfair. It would have been important to compare the positive and negative impacts caused by the construction of the Dam on Turkana Lake.

**1.3) African Development Bank's study on the GIBE III in April 2010, proposed as an "Assessment of Hydrological Impacts of Ethiopia's Omo Basin on Kenya's Lake Turkana Water Levels",**

The Study conducted by the African Development Bank concludes that the filling of Ghibe III reservoir will cause a two meter drop in Lake Turkana Level, which is contrary to the **significant drop** in the Lake's Water Level indicated in this allegation. The report continues to clarify that the dam alone will not alter the annual water inflow volume except in so far as losses that occur within the Ghibe III Reservoir. Hence, the report continued to illustrate that as long as the reservoir losses are kept minimal, once filled, the Ghibe III alone will not cause the Lake Level to fall.

It is also important to note that the two – meter fall in the lake level that is reported to happen during dam filling is anticipated if the dam is filled in one season. But the filling of the dam is designed to be over a period of three years which is quite different from what has been reported.

The report also didn't consider the contribution of the environmental flow, the water released for mimicking the natural flood for recession agriculture and the contribution of the inflow from catchments downstream of the dam. The Committee could have reviewed all the investigation made by the State Party through the Ethiopian Electric Power Corporation that encloses more detailed and accurate information, which was conducted based on available data and information rather than indirect estimations.

The most important aspect of the assessment that is not covered in the analysis is the contribution of increased flow due to the construction of Ghibe III Dam that results from storage of the water in the deep reservoir where the temperature is significantly lower than that of the lake, the water that could have been lost to evaporation over the wider lake surface. The sustained additional flow in the form of saved water can actually reinstate the lake to its former level.

Similar study conducted by the Ethiopian Electric Power Corporation based on actual data and field condition indicated lower drop in the Level of Lake Turkana contrary to the report made by African Development Bank.

#### **1.4) The GIBE III dam's likely significant impact to alter Lake Turkana's fragile Hydrological regime, and threaten its aquatic species and associated Biological systems,**

Lake Turkana is known to exhibit continuous fall in level due to various reasons prior to the construction of the Ghibe III Dam. Some studies indicate that the Lake has already lost about 80 m historically. The annual fluctuation in the lake level is also high (5 - 6 m) that makes the reduction in lake level due to the filling of the Dam insignificant (about 0.5m).

The Study conducted by the African Development Bank named 'Hydrological Impacts of Ethiopia's Dam on Kenya's Lake Turkana Water Levels & Fisheries' concludes that "Development within the Omo-Basin, which removes water for consumptive use especially through irrigation abstraction, will impact the lake through reduced inflows and a reduction in lake levels, associated with this, there will be a reduction in the water table. Since irrigation development is not part of Ghibe III Dam, the assumed reduction will not happen. However, the extent and effect of the reduced flows have not been fully assessed, and they are to some extent offset by increasing runoff due to catchment change."

The recommendation of the indicated study is quite different from what has been presented in the UNESCO report. The Hydrological Study undertaken by African Development Bank is not conclusive and many of the conclusions are not supported by data and scientific findings.

The alleged impact of the dam on the aquatic environment including fishery is more of speculative and is not supported by any scientific investigation and research. Almost all of the information contained in the report in this respect is theoretical. Establishing accurate magnitude of such impact requires long term research and investigation with sufficient baseline data.

The Ghibe III Dam drains only one-third of the Omo - Ghibe Basin. The flow from the remaining part of the basin could be sufficient to maintain the aquatic environment of the Lake. Part of the nutrients in the water of Ghibe River upstream of the dam will reach Lake Turkana as suspended sediment. The environmental flow released from the dam to maintain the riverine ecosystem will have also its own contribution in this respect. The flooding of the downstream areas for recession agriculture can also boost nutrient needs of the Lake.

On the other hand, the delta of Lake Turkana on the confluence with River Omo is shrinking mainly due to the deposition of huge sediment carried by the River into the Lake. This will have far reaching implication on the storage capacity of the Lake, the aquatic environment and the survival of the Lake itself. The huge sediment reaching the Lake can affect the biological productivity of the Lake in the form of reduced light penetration in the lake, low oxygen absorption and poor mixing of the Lake Waters.

The Government of Ethiopia is undertaking massive watershed management to reduce the sediment load in the River, in addition to the contribution of the Ghibe III Dam in reducing the impact of sedimentation needs recognition.



**1.5) Halting all construction on the GIBE III Dam not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage located on the territory of another State Party**

The construction of Ghibe III Dam is part of the effort by the Government of Ethiopia to eradicate poverty and improve the socio economic status of the community living in the Region and elsewhere in Ethiopia and should not be considered as **deliberate measures that might damage directly or indirectly the cultural and natural heritage located on the territory of another state party**. All environmental and social impact assessments carried out so far indicate that the construction of the dam does not have significant impact on the environment including Lake Turkana. The Government of the Federal Democratic Republic of Ethiopia embarked on this project after making sure that the construction of the Dam has positive impact for the environment and the community at large and the Region in general. Taking this into consideration, the construction of Ghibe III Dam will not be halted or suspended.

**1.6) The potential cumulative impacts of the proposed GIBE IV and GIBE V dams and large-scale irrigation plans on the Omo River**

It would be important to understand that irrigation development is not part of the Ghibe III Dam. Similarly, the proposed Ghibe IV and V Dams are not part of the Ghibe III project and should not be considered as **deliberate measures, which might damage directly or indirectly the cultural and natural heritage located on the territory of another state party**.

### **1.7) Inviting a joint World Heritage Centre/IUCN reactive monitoring mission to review the impacts of the GIBE III dam on the Outstanding Universal Value of Lake Turkana**

The Report accuses both the Government of Ethiopia and Kenya for engaging into power trade agreement, which undermines the efforts made by the two Governments to fight poverty and enhance development activities through Regional Integration. The reason behind all these allegations which are one sided and highly biased are not clear for the Federal Democratic Republic of Ethiopia. All studies conducted on Ghibe III Dam, particularly those related to Environmental Impact Assessment are posted on the Website of Ethiopian Electric Power Corporation. It is highly advisable to review these documents fairly so as to avoid biased judgments.

### **2. Other current conservation issues identified by the State Party**

The Ghibe III Dam, once operational, will have far reaching benefits to the surrounding community and the environment at large. The Dam will Regulate Flow to the flood prone areas which will **bring reliable and timely water supply for the recession agriculture,** reduces evaporation losses in the flood plains, brings sustainable flow and positive hydrological balance to the Lake Turkana. The Dam will have impact on the reduction of extended drought periods; will contribute to long-term sustainable development schemes that can positively change the lives of the downstream population. Beyond maintaining the existing natural environment (ecosystem), several development interventions that guarantee improvements in the livelihood of the indigenous population are recommended in the Environment Management and Monitoring Plan. Increased flow from saved water due to storage in deep reservoir under cooler environment can rehabilitate the lake level to its former state.